- (4) The Administrator will determine whether the records maintained by EPA indicate that the convertor possesses unexpended allowances sufficient to cover the transfer claim on the date the transfer claim is processed (i.e., the quantity (in kilograms) to be converted plus 0.1 percent of that quantity (in kilograms)). EPA will take into account any previous transfers, and any production, imports (not including transshipments or used class II controlled substances), or exports (not including transhipments or used class II controlled substances) of class II controlled substances reported by the convertor. Within three working days of receiving a complete transfer claim, the Administrator will take action to notify the convertor as follows:
- (i) The Administrator will issue a notice indicating that EPA does not object to the transfer if EPA's records show that the convertor has sufficient unexpended allowances to cover the transfer claim. EPA will reduce the transferor's balance of unexpended allowances by the quantity to be converted plus 0.1 percent of that quantity (in kilograms). When EPA issues a no objection notice, the transferor may proceed with the transfer. However, if EPA ultimately finds that the transferor did not have sufficient unexpended allowances to cover the claim, the transferor will be held liable for any violations of the regulations of this subpart that occur as a result of, or in conjunction with, the improper transfer
- (ii) The Administrator will issue a notice disallowing the transfer if EPA's records show that the transferor has insufficient unexpended allowances to cover the transfer claim, or that the transferor has failed to respond to one or more Agency requests to supply information needed to make a determination. The transferor may file a notice of appeal, with supporting reasons, with the Administrator within 10 working days after receipt of notification. The Administrator may affirm or vacate the disallowance. If no appeal is taken by the tenth working day after notification, the disallowance shall be final on that day.
- (iii) The transferor may proceed with the transfer if the Administrator does

- not respond to a transfer claim within the three working days specified in paragraph (b)(4) of this section. EPA will reduce the transferor's balance of unexpended allowances by the quantity (in kilograms) to be converted plus 0.1 percent of that quantity (in kilograms). The transferor will be held liable for any violations of the regulations of this subpart that occur as a result of, or in conjunction with, the improper transfer if EPA ultimately finds that the transferor did not have sufficient unexpended allowances or credits to cover the claim.
- (c) Inter-company transfers and Interpollutant transfers. If a person requests an inter-company transfer and an inter-pollutant transfer simultaneously, the quantity (in kilograms) subtracted from the transferor's unexpended production or consumption allowances for the first class II controlled substance will be equal to 100.1 percent of the quantity (in kilograms) of allowances that are being converted and transferred.
- (d) A person receiving a permanent transfer of baseline production allowances or baseline consumption allowances (the transferee) for a specific class II controlled substance will be the person who has their baseline allowances adjusted in accordance with phaseout schedules in this section.

[68 FR 2848, Jan. 21, 2003]

§82.24 Recordkeeping and reporting requirements for class II controlled substances.

- (a) Recordkeeping and reporting. Any person who produces, imports, exports, transforms, or destroys class II controlled substances must comply with the following recordkeeping and reporting requirements:
- (1) Reports required by this section must be mailed to the Administrator within 30 days of the end of the applicable reporting period, unless otherwise specified.
- (2) Revisions of reports that are required by this section must be mailed to the Administrator within 180 days of the end of the applicable reporting period, unless otherwise specified.
- (3) Records and copies of reports required by this section must be retained for three years.

- (4) Quantities of class II controlled substances must be stated in terms of kilograms in reports required by this section.
- (5) Reports and records required by this section may be used for purposes of compliance determinations. These requirements are not intended as a limitation on the use of other evidence admissible under the Federal Rules of Evidence. Failure to provide the reports, petitions and records required by this section and to certify the accuracy of the information in the reports, petitions and records required by this section, will be considered a violation of this subpart. False statements made in reports, petitions and records will be considered violations of Section 113 of the Clean Air Act and under 18 U.S.C. 1001.
- (b) *Producers*. Persons ("producers") who produce class II controlled substances during a control period must comply with the following record-keeping and reporting requirements:
- (1) Reporting—Producers. For each quarter, each producer of a class II controlled substance must provide the Administrator with a report containing the following information:
- (i) The quantity (in kilograms) of production of each class II controlled substance used in processes resulting in their transformation by the producer and the quantity (in kilograms) intended for transformation by a second party;
- (ii) The quantity (in kilograms) of production of each class II controlled substance used in processes resulting in their destruction by the producer and the quantity (in kilograms) intended for destruction by a second party;
- (iii) The expended allowances for each class II controlled substance:
- (iv) The producer's total of expended and unexpended production allowances, consumption allowances, export production allowances, and Article 5 allowances at the end of that quarter;
- (v) The quantity (in kilograms) of class II controlled substances sold or transferred during the quarter to a person other than the producer for use in processes resulting in their transformation or eventual destruction;

- (vi) A list of the quantities and names of class II controlled substances, exported by the producer to a Party to the Protocol, that will be transformed or destroyed and therefore were not produced expending production or consumption allowances;
- (vii) For transformation in the U.S. or by a person of another Party, one copy of a transformation verification from the transformer for a specific class II controlled substance and a list of additional quantities shipped to that same transformer for the quarter;
- (viii) For destruction in the U.S. or by a person of another Party, one copy of a destruction verification as required in paragraph (e) of this section for a particular destroyer, destroying the same class II controlled substance, and a list of additional quantities shipped to that same destroyer for the quarter;
- (ix) In cases where the producer produced class II controlled substances using export production allowances, a list of U.S. entities that purchased those class II controlled substances and exported them to a Party to the Protocol;
- (x) In cases where the producer produced class II controlled substances using Article 5 allowances, a list of U.S. entities that purchased those class II controlled substances and exported them to Article 5 countries; and
- (xi) A list of the HCFC 141b-exemption allowance holders from whom orders were received and the quantity (in kilograms) of HCFC-141b requested and produced.
- (2) Recordkeeping—Producers. Every producer of a class II controlled substance during a control period must maintain the following records:
- (i) Dated records of the quantity (in kilograms) of each class II controlled substance produced at each facility;
- (ii) Dated records of the quantity (in kilograms) of class II controlled substances produced for use in processes that result in their transformation or for use in processes that result in their destruction;
- (iii) Dated records of the quantity (in kilograms) of class II controlled substances sold for use in processes that result in their transformation or for

use in processes that result in their destruction;

- (iv) Dated records of the quantity (in kilograms) of class II controlled substances produced with export production allowances or Article 5 allowances:
- (v) Copies of invoices or receipts documenting sale of class II controlled substances for use in processes that result in their transformation or for use in processes that result in their destruction;
- (vi) Dated records of the quantity (in kilograms) of each class II controlled substance used at each facility as feed-stocks or destroyed in the manufacture of a class II controlled substance or in the manufacture of any other substance, and any class II controlled substance introduced into the production process of the same class II controlled substance at each facility;
- (vii) Dated records of the quantity (in kilograms) of raw materials and feedstock chemicals used at each facility for the production of class II controlled substances;
- (viii) Dated records of the shipments of each class II controlled substance produced at each plant;
- (ix) The quantity (in kilograms) of class II controlled substances, the date received, and names and addresses of the source of used materials containing class II controlled substances which are recycled or reclaimed at each plant;
- (x) Records of the date, the class II controlled substance, and the estimated quantity of any spill or release of a class II controlled substance that equals or exceeds 100 pounds;
- (xi) Transformation verification in the case of transformation, or the destruction verification in the case of destruction as required in paragraph (e) of this section showing that the purchaser or recipient of a class II controlled substance, in the U.S. or in another country that is a Party, certifies the intent to either transform or destroy the class II controlled substance, or sell the class II controlled substance for transformation or destruction in cases when allowances were not expended;
- (xii) Written verifications from a U.S. purchaser that the class II con-

trolled substance was exported to a Party in accordance with the requirements in this section, in cases where export production allowances were expended to produce the class II controlled substance;

- (xiii) Written verifications from a U.S. purchaser that the class II controlled substance was exported to an Article 5 country in cases where Article 5 allowances were expended to produce the class II controlled substance;
- (xiv) Written verifications from a U.S. purchaser that HCFC-141b was manufactured for the express purpose of meeting HCFC-141b exemption needs in accordance with information submitted under §82.16(h), in cases where HCFC-141b exemption allowances were expended to produce the HCFC-141b.
- (3) For any person who fails to maintain the records required by this paragraph, or to submit the report required by this paragraph, the Administrator may assume that the person has produced at full capacity during the period for which records were not kept, for purposes of determining whether the person has violated the prohibitions at §82.15.
- (c) *Importers*. Persons ("importers") who import class II controlled substances during a control period must comply with the following record-keeping and reporting requirements:
- (1) Reporting—Importers. For each quarter, an importer of a class II controlled substance (including importers of used class II controlled substances) must submit to the Administrator a report containing the following information:
- (i) Summaries of the records required in paragraphs (c)(2)(i) through (xvi) of this section for the previous quarter;
- (ii) The total quantity (in kilograms) imported of each class II controlled substance for that quarter;
- (iii) The commodity code for the class II controlled substances imported, which must be one of those listed in Appendix K to this subpart;
- (iv) The quantity (in kilograms) of those class II controlled substances imported that are used class II controlled substances:
- (v) The quantity (in kilograms) of class II controlled substances imported

for that quarter and totaled by chemical for the control period to date;

- (vi) For substances for which EPA has apportioned baseline production and consumption allowances, the importer's total sum of expended and unexpended consumption allowances by chemical as of the end of that quarter;
- (vii) The quantity (in kilograms) of class II controlled substances imported for use in processes resulting in their transformation or destruction;
- (viii) The quantity (in kilograms) of class II controlled substances sold or transferred during that quarter to each person for use in processes resulting in their transformation or eventual destruction; and
- (ix) Transformation verifications showing that the purchaser or recipient of imported class II controlled substances intends to transform those substances or destruction verifications showing that the purchaser or recipient intends to destroy the class II controlled substances (as provided in paragraph (e) of this section).
 - (x) [Reserved]
- (xi) A list of the HCFC 141b-exemption allowance holders from whom orders were received and the quantity (in kilograms) of HCFC-141b requested and imported.
- (2) Recordkeeping—Importers. An importer of a class II controlled substance (including used class II controlled substances) must maintain the following records:
- (i) The quantity (in kilograms) of each class II controlled substance imported, either alone or in mixtures, including the percentage of each mixture which consists of a class II controlled substance:
- (ii) The quantity (in kilograms) of those class II controlled substances imported that are used and the information provided with the petition where a petition is required under paragraph (c)(3) of this section;
- (iii) The quantity (in kilograms) of class II controlled substances other than transhipments or used substances imported for use in processes resulting in their transformation or destruction;
- (iv) The quantity (in kilograms) of class II controlled substances other than transhipments or used substances imported and sold for use in processes

- that result in their destruction or transformation;
- (v) The date on which the class II controlled substances were imported;
- (vi) The port of entry through which the class II controlled substances passed;
- (vii) The country from which the imported class II controlled substances were imported;
- (viii) The commodity code for the class II controlled substances shipped, which must be one of those listed in Appendix K to this subpart;
- (ix) The importer number for the shipment;
- (x) A copy of the bill of lading for the import;
 - (xi) The invoice for the import;
- (xii) The quantity (in kilograms) of imports of used class II controlled substances;
 - (xiii) The U.S. Customs entry form;
- (xiv) Dated records documenting the sale or transfer of class II controlled substances for use in processes resulting in their transformation or destruction:
- (xv) Copies of transformation verifications or destruction verifications indicating that the class II controlled substances will be transformed or destroyed (as provided in paragraph (e) of this section).
- (xvi) Written verifications from a U.S. purchaser that HCFC-141b was imported for the express purpose of meeting HCFC-141b exemption needs in accordance with information submitted under §82.16(h), and that the quantity will not be resold, in cases where HCFC-141b exemption allowances were expended to import the HCFC-141b.
- (3) Petition to import used class II controlled substances and transhipment-Importers. For each individual shipment over 5 pounds of a used class II controlled substance as defined in §82.3 for which EPA has apportioned baseline production and consumption allowances, an importer must submit directly to the Administrator, at least 40 working days before the shipment is to leave the foreign port of export, the following information in a petition:
- (i) The name and quantity (in kilograms) of the used class II controlled substance to be imported;

- (ii) The name and address of the importer, the importer ID number, the contact person, and the phone and fax numbers;
- (iii) Name, address, contact person, phone number and fax number of all previous source facilities from which the used class II controlled substance was recovered;
- (iv) A detailed description of the previous use of the class II controlled substance at each source facility and a best estimate of when the specific controlled substance was put into the equipment at each source facility, and, when possible, documents indicating the date the material was put into the equipment;
- (v) A list of the name, make and model number of the equipment from which the material was recovered at each source facility;
- (vi) Name, address, contact person, phone number and fax number of the exporter and of all persons to whom the material was transferred or sold after it was recovered from the source facility;
- (vii) The U.S. port of entry for the import, the expected date of shipment and the vessel transporting the chemical. If at the time of submitting a petition the importer does not know the U.S. port of entry, the expected date of shipment and the vessel transporting the chemical, and the importer receives a non-objection notice for the individual shipment in the petition, the importer is required to notify the Administrator of this information prior to the actual U.S. Customs entry of the individual shipment;
- (viii) A description of the intended use of the used class II controlled substance, and, when possible, the name, address, contact person, phone number and fax number of the ultimate purchaser in the United States;
- (ix) The name, address, contact person, phone number and fax number of the U.S. reclamation facility, where applicable;
- (x) If someone at the source facility recovered the class II controlled substance from the equipment, the name and phone and fax numbers of that person;
- (xi) If the imported class II controlled substance was reclaimed in a

- foreign Party, the name, address, contact person, phone number and fax number of any or all foreign reclamation facility(ies) responsible for reclaiming the cited shipment:
- (xii) An export license from the appropriate government agency in the country of export and, if recovered in another country, the export license from the appropriate government agency in that country;
- (xiii) If the imported used class II controlled substance is intended to be sold as a refrigerant in the U.S., the name and address of the U.S. reclaimer who will bring the material to the standard required under subpart F of this part, if not already reclaimed to those specifications; and
- (xiv) A certification of accuracy of the information submitted in the petition.
- (4) Review of petition to import used class II controlled substances and transhipments—Importers. Starting on the first working day following receipt by the Administrator of a petition to import a used class II controlled substance, the Administrator will initiate a review of the information submitted under paragraph (c)(3) of this section and take action within 40 working days to issue either an objection-notice or a non-objection notice for the individual shipment to the person who submitted the petition to import the used class II controlled substance.
- (i) The Administrator may issue an objection notice to a petition for the following reasons:
- (A) If the Administrator determines that the information is insufficient, that is, if the petition lacks or appears to lack any of the information required under paragraph (c)(3) of this section;
- (B) If the Administrator determines that any portion of the petition contains false or misleading information, or the Administrator has information from other U.S. or foreign government agencies indicating that the petition contains false or misleading information:
- (C) If the transaction appears to be contrary to provisions of the Vienna Convention on Substances that Deplete the Ozone Layer, the Montreal Protocol and Decisions by the Parties, or

the non-compliance procedures outlined and instituted by the Implementation Committee of the Montreal Protocol:

- (D) If the appropriate government agency in the exporting country has not agreed to issue an export license for the cited individual shipment of used class II controlled substance;
- (E) If reclamation capacity is installed or is being installed for that specific class II controlled substance in the country of recovery or country of export and the capacity is funded in full or in part through the Multilateral Fund.
- (ii) Within ten (10) working days after receipt of the objection notice, the importer may re-petition the Administrator, only if the Administrator indicated "insufficient information" as the basis for the objection notice. If no appeal is taken by the tenth working day after the date on the objection notice, the objection shall become final. Only one re-petition will be accepted for any original petition received by EPA.
- (iii) Any information contained in the re-petition which is inconsistent with the original petition must be identified and a description of the reason for the inconsistency must accompany the re-petition.
- (iv) In cases where the Administrator does not object to the petition based on the criteria listed in paragraph (c)(4)(i) of this section, the Administrator will issue a non-objection notice.
- (v) To pass the approved used class II controlled substances through U.S. Customs, the petition and the non-objection notice issued by EPA must accompany the shipment through U.S. Customs.
- (vi) If for some reason, following EPA's issuance of a non-objection notice, new information is brought to EPA's attention which shows that the non-objection notice was issued based on false information, then EPA has the right to:
 - (A) Revoke the non-objection notice;
- (B) Pursue all means to ensure that the class II controlled substance is not imported into the U.S.; and
- (C) Take appropriate enforcement actions.

- (vii) Once the Administrator issues a non-objection notice, the person receiving the non-objection notice is permitted to import the individual shipment of used class II controlled substance only within the same control period as the date stamped on the non-objection notice.
- (viii) A person receiving a non-objection notice from the Administrator for a petition to import used class II controlled substances must maintain the following records:
 - (A) A copy of the petition;
 - (B) The EPA non-objection notice;
- (C) The bill of lading for the import; and
- (D) U.S. Customs entry documents for the import that must include one of the commodity codes from Appendix K to this subpart.
- (5) Recordkeeping for transhipments—Importers. Any person who tranships a class II controlled substance must maintain records that indicate:
- (i) That the class II controlled substance shipment originated in a foreign country:
- (ii) That the class II controlled substance shipment is destined for another foreign country; and
- (iii) That the class II controlled substance shipment will not enter interstate commerce within the U.S.
- (d) Exporters. Persons ("exporters") who export class II controlled substances during a control period must comply with the following reporting requirements:
- (1) Reporting—Exporters. For any exports of class II controlled substances not reported under §82.20 (additional consumption allowances), or under paragraph (b)(2) of this section (reporting for producers of class II controlled substances), each exporter who exported a class II controlled substance must submit to the Administrator the following information within 30 days after the end of each quarter in which the unreported exports left the U.S.:
- (i) The names and addresses of the exporter and the recipient of the exports:
- (ii) The exporter's Employer Identification Number;

- (iii) The type and quantity (in kilograms) of each class II controlled substance exported and what percentage, if any of the class II controlled substance is used;
- (iv) The date on which, and the port from which, the class II controlled substances were exported from the U.S. or its territories:
- (v) The country to which the class II controlled substances were exported;
- (vi) The quantity (in kilograms) exported to each Article 5 country;
- (vii) The commodity code for the class II controlled substances shipped, which must be one of those listed in Appendix K to this subpart;
- (viii) For persons reporting transformation or destruction, the invoice or sales agreement containing language similar to the transformation verifications that the purchaser or recipient of imported class II controlled substances intends to transform those substances, or destruction verifications showing that the purchaser or recipient intends to destroy the class II controlled substances (as provided in paragraph (e) of this section).
- (2) Reporting export production allowances—Exporters. In addition to the information required in paragraph (d)(1) of this section, any exporter using export production allowances must also provide the following to the Administrator:
- (i) The Employer Identification Number on the Shipper's Export Declaration Form or Employer Identification Number of the shipping agent shown on the U.S. Customs Form 7525;
- (ii) The exporting vessel on which the class II controlled substances were shipped; and
- (iii) The quantity (in kilograms) exported to each Party.
- (3) Reporting Article 5 allowances—Exporters. In addition to the information required in paragraph (d)(1) of this section, any exporter using Article 5 allowances must also provide the following to the Administrator:
- (i) The Employer Identification Number on the Shipper's Export Declaration Form or Employer Identification Number of the shipping agent shown on the U.S. Customs Form 7525; and

- (ii) The exporting vessel on which the class II controlled substances were shipped.
- (4) Reporting used class II controlled substances—Exporters. Any exporter of used class II controlled substances must indicate on the bill of lading or invoice that the class II controlled substance is used, as defined in §82.3.
- (e) Transformation and destruction. Any person who transforms or destroys class II controlled substances must comply with the following record-keeping and reporting requirements:
- (1) Recordkeeping—Transformation and destruction. Any person who transforms or destroys class II controlled substances produced or imported by another person must maintain the following:
- (i) Copies of the invoices or receipts documenting the sale or transfer of the class II controlled substances to the person;
- (ii) Records identifying the producer or importer of the class II controlled substances received by the person;
- (iii) Dated records of inventories of class II controlled substances at each plant on the first day of each quarter;
- (iv) Dated records of the quantity (in kilograms) of each class II controlled substance transformed or destroyed;
- (v) In the case where class II controlled substances were purchased or transferred for transformation purposes, a copy of the person's transformation verification as provided under paragraph (e)(3) of this section.
- (vi) Dated records of the names, commercial use, and quantities (in kilograms) of the resulting chemical(s) when the class II controlled substances are transformed; and
- (vii) Dated records of shipments to purchasers of the resulting chemical(s) when the class II controlled substances are transformed.
- (viii) In the case where class II controlled substances were purchased or transferred for destruction purposes, a copy of the person's destruction verification, as provided under paragraph (e)(5) of this section.
- (2) Reporting—Transformation and destruction. Any person who transforms or destroys class II controlled substances and who has submitted a transformation verification ((paragraph

- (e)(3) of this section) or a destruction verification (paragraph (e)(5) of this section) to the producer or importer of the class II controlled substances, must report the following:
- (i) The names and quantities (in kilograms) of the class II controlled substances transformed for each control period within 45 days of the end of such control period; and
- (ii) The names and quantities (in kilograms) of the class II controlled substances destroyed for each control period within 45 days of the end of such control period.
- (3) Reporting—Transformation. Any person who purchases class II controlled substances for purposes of transformation must provide the producer or importer with a transformation verification that the class II controlled substances are to be used in processes that result in their transformation.
- (i) The transformation verification shall include the following:
- (A) Identity and address of the person intending to transform the class II controlled substances;
- (B) The quantity (in kilograms) of class II controlled substances intended for transformation;
- (C) Identity of shipments by purchase order number(s), purchaser account number(s), by location(s), or other means of identification;
- (D) Period of time over which the person intends to transform the class II controlled substances; and
 - (E) Signature of the verifying person.
 - (ii) [Reserved]
- (4) Reporting—Destruction. Any person who destroys class II controlled substances shall provide EPA with a one-time report containing the following information:
- (i) The destruction unit's destruction efficiency;
- (ii) The methods used to record the volume destroyed;
- (iii) The methods used to determine destruction efficiency:
- (iv) The name of other relevant federal or state regulations that may apply to the destruction process;
- (v) Any changes to the information in paragraphs (e)(4)(i), (ii), and (iii) of this section must be reflected in a revi-

- sion to be submitted to EPA within 60 days of the change(s).
- (5) Reporting—Destruction. Any person who purchases or receives and subsequently destroys class II controlled substances that were originally produced without expending allowances shall provide the producer or importer from whom it purchased or received the class II controlled substances with a verification that the class II controlled substances will be used in processes that result in their destruction.
- (i) The destruction verification shall include the following:
- (A) Identity and address of the person intending to destroy class II controlled substances:
- (B) Indication of whether those class II controlled substances will be completely destroyed, as defined in §82.3, or less than completely destroyed, in which case the destruction efficiency at which such substances will be destroyed must be included;
- (C) Period of time over which the person intends to destroy class II controlled substances; and
 - (D) Signature of the verifying person.
 - (ii) [Reserved]
- (f) Heels-Recordkeeping and reporting. Any person who brings into the U.S. a rail car, tank truck, or ISO tank containing a heel, as defined in §82.3, of class II controlled substances, must take the following actions:
- (1) Indicate on the bill of lading or invoice that the class II controlled substance in the container is a heel.
- (2) Report within 30 days of the end of the control period the quantity (in kilograms) brought into the U.S. and certify:
- (i) That the residual quantity (in kilograms) in each shipment is no more than 10 percent of the volume of the container;
- (ii) That the residual quantity (in kilograms) in each shipment will either:
- (A) Remain in the container and be included in a future shipment;
 - (B) Be recovered and transformed;
- (C) Be recovered and destroyed; or
- (D) Be recovered for a non-emissive use.
- (3) Report on the final disposition of each shipment within 30 days of the end of the control period.

Pt. 82, Subpt. A, App. A

- (g) HCFC 141b exemption allowances—Reporting and recordkeeping. (1) Any person allocated HCFC-141b exemption allowances who confers a quantity of the HCFC-141b exemption allowances to a producer or import and places an order for the production or import of HCFC-141b with a verification that the HCFC-141b will only be used for the exempted purpose and not be resold must submit semi-annual reports, due 30 days after the end of the second and fourth respectively, to the Administrator containing the following information:
- (i) Total quantity (in kilograms) HCFC-141b received during the 6 month period; and
- (ii) The identity of the supplier of HCFC-141b on a shipment-by-shipment basis during the 6 month period.
- (2) Any person allocated HCFC-141b exemption allowances must keep records of letters to producers and importers conferring unexpended HCFC-141b exemption allowances for the specified control period in the notice, orders for the production or import of HCFC-141b under those letters and written verifications that the HCFC-141b was produced or imported for the express purpose of meeting HCFC-141b exemption needs in accordance with information submitted under §82.16(h), and that the quantity will not be resold.

[68 FR 2848, Jan. 21, 2003, as amended at 71 FR 41172, July 20, 2006]

APPENDIX A TO SUBPART A OF PART 82— CLASS I CONTROLLED SUBSTANCES

Class 1 controlled substances	ODP
A. Group I:	
CFCI ₃ -Trichlorofluoromethane (CFC-II)	1.0
CF ₂ Cl ₂ -Dichlorofifluoromethane (CFC-12)	1.0
C ₂ F ₃ Cl ₃ -Trichlorotrifluoroethane (CFC-113)	0.8
C ₂ F ₄ Cl ₂ -Dichlorotetrafluoroethane (CFC-	0.0
114)	1.0
C ₂ F ₅ Cl-Monochloropentafluoroethane	1.0
(CFC-115)	0.6
All isomers of the above chemicals	
B. Group II:	
CF ₂ CIBr-Bromochlorodifluoromethane	
(Halon-1211)	3.0
CF ₃ Br-Bromotrifluoromethane (Halon-1301)	10.0
C ₂ F ₄ Br ₂ -Dibromotetrafluoroethane (Halon-	
2402)	6.0
All isomers of the above chemicals	
C. Group III:	
CF ₃ Cl-Chlorotrifluoromethane (CFC-13)	1.0
C ₂ FCl ₅ -(CFC-111)	1.0
C ₂ F ₂ Cl ₄ -(CFC-112)	1.0
O FOL (OFO 011)	1.0
C ₃ FCl ₇ -(CFC-211)	1.0

C ₃ F ₃ O _{15*} (CFC-213) C ₃ F ₄ Cl _{4*} (CFC-214) C ₃ F ₅ Cl _{2*} (CFC-215) C ₃ F ₆ Cl _{2*} (CFC-216) C ₃ F ₇ Cl ₄ (CFC-217) All isomers of the above chemicals D. Group IV: CCl _{4*} -Carbon Tetrachloride E. Group V: C ₂ H ₃ Cl _{3*} -1,1,1 Trichloroethane (Methyl chloroform) All isomers of the above chemical except 1,1,2-trichloroethane F. Group VI: CH ₃ Br—Bromomethane (Methyl Bromide) G. Group VII: CHFBR ₂ CHF ₂ Br (HBFC-2201) C ₄ H ₇ Br (HBFC-2201) C ₇ H ₇ Br (HBFC-2201) C ₈ H ₇ Br (HBFC-2201) C ₉ H ₇ Br (HBFC-2201) C ₁ H ₇ Br (HBFC-2201) C ₁ H ₇ Br (HBFC-2201) C ₂ H ₇ Br (HBFC-2201) C ₃ H ₇ Br (HBFC-2201) C ₄ H ₇ Br (HBFC-2201) C ₅ H ₇ Br (HBFC-2201) C ₇ H ₇ Br (HBFC-2201) C ₈ H ₇ Br (HBFC-2201) C ₉ H ₇ Br (HBFC-2201) C ₁ H ₇ Br (HBFC-2201) C ₁ H ₇ Br (HBFC-2201) C ₂ H ₇ Br (HBFC-2201) C ₃ H ₇ Br (HBFC-2201) C ₄ H ₇ Br (HBFC-2201) C ₅ H ₇ Br (HBFC-2201) C ₇ H ₇ Br (HBFC-2201) C ₈ H ₇ Br (HBFC-2201) C ₉ H ₇		
C ₃ F ₃ Cl ₃ -(CFC-213) C ₃ F ₄ Cl ₄ -(CFC-214) C ₃ F ₅ Cl ₃ -(CFC-215) C ₃ F ₆ Cl ₂ -(CFC-216) C ₃ F ₇ Cl ₄ (CFC-217) All isomers of the above chemicals D. Group IV: CCl ₄ -Carbon Tetrachloride E. Group V: C ₂ H ₃ Cl ₃ -1,1,1 Trichloroethane (Methyl chloroform) All isomers of the above chemical except 1,1,2-trichloroethane F. Group VI: CH ₃ Br—Bromomethane (Methyl Bromide) G. Group VII: CHFBR ₂ CHF ₂ Br (HBFC-2201) C ₂ H ₇ Br (HBFC-2201) C ₃ H ₇ Br (HBFC-3201) C ₄ H ₇ Br (HBFC-3201) C ₄ H ₇ Br (HBFC-3201) C ₅ H ₇ Br (HBFC-3201) C ₇ H ₇ Br (10,1-1) C ₈ H ₇ Br (10,1-1) C ₉ H ₇ Br (10,1-1) C ₁ H ₇ Br (10,1-1) C ₁ H ₇ Br (10,1-1) C ₂ H ₁ F ₂ Br (10,1-1) C ₃ H ₇ Br (10,1-1) C ₄ H ₇ Br (10,1-1) C ₅ H ₇ Br (10,1-1) C ₇ H ₇ Br (10,1-1) C ₈ H ₇ Br (10,1-1) C ₉ H ₇ Br (10,1-1) C ₉ H ₇ Br (10,1-1) C ₁ H ₇ Br (10,1-1) C ₁ H ₇ Br (10,1-1) C ₂ H ₁ Br (10,1-1) C ₃ H ₇ Br (10,1-1) C ₄ H ₇ Br (10,1-1) C ₅ H ₇ Br (10,1-1) C ₆ H ₇ Br (10,1-1) C ₇ H	Class 1 controlled substances	ODP
C ₃ F ₃ Cl ₃ -(CFC-213) C ₃ F ₄ Cl ₄ -(CFC-214) C ₃ F ₅ Cl ₃ -(CFC-215) C ₃ F ₆ Cl ₂ -(CFC-216) C ₃ F ₇ Cl ₄ (CFC-217) All isomers of the above chemicals D. Group IV: CCl ₄ -Carbon Tetrachloride E. Group V: C ₂ H ₃ Cl ₃ -1,1,1 Trichloroethane (Methyl chloroform) All isomers of the above chemical except 1,1,2-trichloroethane F. Group VI: CH ₃ Br—Bromomethane (Methyl Bromide) G. Group VII: CHFBR ₂ CHF ₂ Br (HBFC-2201) C ₂ H ₇ Br (HBFC-2201) C ₃ H ₇ Br (HBFC-3201) C ₄ H ₇ Br (HBFC-3201) C ₄ H ₇ Br (HBFC-3201) C ₅ H ₇ Br (HBFC-3201) C ₇ H ₇ Br (10,1-1) C ₈ H ₇ Br (10,1-1) C ₉ H ₇ Br (10,1-1) C ₁ H ₇ Br (10,1-1) C ₁ H ₇ Br (10,1-1) C ₂ H ₁ F ₂ Br (10,1-1) C ₃ H ₇ Br (10,1-1) C ₄ H ₇ Br (10,1-1) C ₅ H ₇ Br (10,1-1) C ₇ H ₇ Br (10,1-1) C ₈ H ₇ Br (10,1-1) C ₉ H ₇ Br (10,1-1) C ₉ H ₇ Br (10,1-1) C ₁ H ₇ Br (10,1-1) C ₁ H ₇ Br (10,1-1) C ₂ H ₁ Br (10,1-1) C ₃ H ₇ Br (10,1-1) C ₄ H ₇ Br (10,1-1) C ₅ H ₇ Br (10,1-1) C ₆ H ₇ Br (10,1-1) C ₇ H	C ₃ F ₂ Cl ₆ -(CFC-212)	1.0
C ₃ F ₄ Cl ₄ -(CFC-214) C ₃ F ₅ Cl ₃ -(CFC-215) C ₃ F ₆ Cl ₂ -(CFC-216) C ₃ F ₇ Cl-(CFC-216) C ₃ F ₇ Cl-(CFC-217) All isomers of the above chemicals D. Group IV: CCl ₄ -Carbon Tetrachloride E. Group V: C ₂ H ₃ Cl ₃ -1,1,1 Trichloroethane (Methyl chloroform) All isomers of the above chemical except 1,1,2-trichloroethane F. Group VI: CH ₃ Br—Bromomethane (Methyl Bromide) G. Group VII: CHFBR ₂ CHF ₂ Br (HBFC-2201) CH ₂ FBr C ₂ HF ₂ Br ₃ C ₃ HF ₄ Br C ₄ HF ₂ Br ₃ C ₇ HF ₄ Br C ₇ H ₇ S ₈ Br C ₇ H ₈ F ₈ Br C ₈ HF ₈ F ₈ Degrade (Capta) C ₉ HF ₈ F ₈ Degrade (Capta) C ₁ HF ₁ HF ₁ C ₂ H ₁ F ₂ F ₃ Br C ₃ HF ₂ Br ₃ C ₄ HF ₃ Br C ₅ H ₁ F ₈ Br C ₇ H ₁ F ₈ Br C ₇ H ₁ F ₈ Br C ₈ HF ₈ Br C ₉ H ₁ F ₈ Br C ₁ H ₁ H ₁ Br C ₁ H ₁ H ₂ Br C ₂ H ₁ F ₃ Br C ₃ HF ₃ Br ₄ C ₄ H ₅ Br C ₅ H ₁ F ₈ Br C ₇ H ₁ F ₈ Br C ₇ H ₁ F ₈ Br C ₈ H ₁ F ₈ Br C ₉ H ₂ F ₃ Br ₃ C ₁ H ₂ F ₃ Br ₃ C ₃ H ₁ F ₃ Br ₄ C ₄ H ₅ F ₈ Br C ₅ H ₁ F ₁ Br C ₆ H ₁ F ₁ F ₁ Br C ₇ H ₁ F ₁ F ₂ Br C ₇ H ₁ F ₁ F ₃ Br C ₇ H ₁ F ₃ Br C ₈ H ₁ F ₈ Br C ₉ H ₁ F ₁ Br C ₁ H ₂ F ₃ Br C ₃ H ₁ F ₃ Br C ₄ H ₅ F ₃ Br C ₅ H ₁ F ₅ BR C ₇ H ₁ F ₃ Br C ₈ H ₁ F ₃ Br C ₉ H ₁ F ₃ Br C ₁ H ₁ F ₃ Br C ₁ H ₂ F ₃ Br C ₃ H ₃ F ₄ Br C ₃ H ₄ F ₃ Br C		1.0
C ₃ F ₅ Cl ₃ -(CFC-215) C ₃ F ₆ Cl ₂ -(CFC-216) C ₃ F ₆ Cl ₂ -(CFC-217) All isomers of the above chemicals D. Group IV: CCl ₂ -Carbon Tetrachloride E. Group V: C ₂ H ₃ Cl ₃ -1,1,1 Trichloroethane (Methyl chloroform) All isomers of the above chemical except 1,1,2-trichloroethane F. Group VI: CH ₃ Br—Bromomethane (Methyl Bromide) G. Group VII: CHFBR ₂ CHF2 Br CHF2 Br CHF2 Br CHF2 Br CHF2 Br CHF3 Br		1.0
C₃ F₄ Cl₃-(CFC-216) C₃ F₁ Cl-(CFC-217) All isomers of the above chemicals D. Group IV: CCl₄-Carbon Tetrachloride E. Group V: C₂ H₃ Cl₃-1,1,1 Trichloroethane (Methyl chloroform) All isomers of the above chemical except 1,1,2-trichloroethane F. Group VI: CH₃ Br—Bromomethane (Methyl Bromide) G. Group VII: CHFBR₂ CHF₂ Br (HBFC-2201) C₂ Hҕ² Br (HBFC-2201) C₂ Hҕ² Br C₂ H₃ Fβr C₃ Hҕ² Br C₃ Hҕ² Br C₃ Hҕ² Br C₃ Hҕ² Br C₃ H₃ F₃ Br		1.0
C ₃ F ₇ Cl-(CFC-217) All isomers of the above chemicals D. Group IV: CCl ₄ -Carbon Tetrachloride E. Group V: C ₂ H ₃ Cl ₃ -1,1,1 Trichloroethane (Methyl chloroform) All isomers of the above chemical except 1,1,2-trichloroethane F. Group VI: CH ₃ Br—Bromomethane (Methyl Bromide) G. Group VII: CHFBR ₂ CHF ₂ Br (HBFC-2201) CH ₂ FBr C ₂ HF ₂ Br ₃ C ₃ HF ₂ Br ₄ C ₄ HF ₂ Br ₅ C ₇ HF ₈ Br C ₈ HF ₉ Br C ₉ H ₉ F ₉ Br C ₉ H ₉ F ₉ Br C ₁ H ₁ F ₁ Br C ₁ H ₁ F ₁ Br C ₂ H ₂ F ₃ Br C ₃ HF ₂ Br C ₄ H ₅ Br C ₅ H ₁ F ₈ Br C ₇ H ₁ F ₈ Br C ₇ H ₁ F ₈ Br C ₈ HF ₉ Br C ₉ H ₁ F ₉ Br C ₁ H ₁ F ₉ Br C ₁ H ₁ F ₉ Br C ₂ H ₁ F ₉ Br C ₃ HF ₁ Br ₃ C ₄ H ₁ F ₉ Br C ₅ H ₁ F ₉ Br C ₇ H ₁ F ₉ Br C ₈ HF ₉ Br C ₉ H ₁ F ₉ Br C ₉ H ₁ F ₉ Br C ₁ H ₁ F ₉ Br C ₂ H ₁ F ₃ Br C ₃ HF ₄ Br C ₄ H ₅ F ₉ Br C ₅ H ₁ F ₉ Br C ₇ H ₁ F ₉ Br C ₈ H ₁ F ₉ Br C ₉ H ₂ F ₉ Br C ₁ H ₂ H ₃ D ₁ C ₁ H ₂ F ₃ Br C ₂ H ₃ F ₄ Br C ₁ H ₂ F ₃ Br C ₂ H ₃ F ₅ Br C ₃ H ₄ F ₅ Br C ₄ H ₅ F ₅ Br C ₅ H ₄ F ₅ Br C ₆ H ₄ F ₇ Br C ₇ H ₄ F ₇ Br C ₈ H ₇ F ₈ Br C ₉ H ₄ F ₇ Br C ₁ H ₂ F ₃ Br C ₁ H ₂ F ₃ Br C ₃ H ₄ F ₅ Br C ₃ H ₅ F ₅ Br C ₃ H ₄ F ₃ Br C ₄ H ₅ F ₅ Br C ₅ H ₄ F ₅ Br C ₆ H ₄ F ₇ Br C ₇ H ₇ F ₇ Br		1.0
All isomers of the above chemicals D. Group IV: CCl _a -Carbon Tetrachloride E. Group V: C ₂ H ₃ Cl ₃ -1,1,1 Trichloroethane (Methyl chloroform) All isomers of the above chemical except 1,1,2-trichloroethane F. Group VI: CH ₃ Br—Bromomethane (Methyl Bromide) G. Group VII: CHFBR ₂ G. CHFBR ₃ C. CHFBR ₄ G. CHFBR ₄ G. CHFBR ₄ G. CHFBR ₃ C. CHFBR ₄ C. CHFBR ₃ C. CHFBR ₃ C. CHFBR ₄ C. CHFBR ₄ C. CHFBR ₃ C. CHFBR ₄ C. CHFBR ₃ C. CHFBR ₄ C. CHFBR ₄ C. CHFBR ₄ C. CHFBR ₅ C. CHFBR ₄ C. CHFBR ₅ C. CHFBR ₄ C. CHFBR ₅ C. CHFBR		1.0
D. Group IV: CCI ₃ -Carbon Tetrachloride E. Group V: C ₂ H ₃ CI ₃ -1,1,1 Trichloroethane (Methyl chloroform) All isomers of the above chemical except 1,1,2-trichloroethane F. Group VI: CH ₃ Br—Bromomethane (Methyl Bromide) G. Group VII: CHFBR ₂ CHF ₂ Br (HBFC-2201) C ₂ HF ₂ Br (HBFC-2201) C ₃ HF ₂ Br (HBFC-2201) C ₄ HF ₂ Br (HBFC-2201) C ₇ HF ₂ Br (HBFC-2201) C ₈ HF ₈ Br (1,0,7) C ₉ HF ₈ Br (1,0,7) C ₁ HF ₂ Br (1,0,7) C ₁ HF ₂ Br (1,0,7) C ₂ HF ₃ Br (1,0,7) C ₄ HF ₅ Br (1,0,7) C ₅ HF ₅ Br (1,0,7) C ₇ HF ₇ Br (1,0,7) C ₈ HF ₉ Br (1,0,7) C ₉ HF ₉ Br (1,0,7) C ₁ HF ₁ Br (1,0,7) C ₁ HF ₁ Br (1,0,7) C ₁ HF ₂ Br (1,0,7) C ₁ HF ₁ Br (1,0,7) C ₂ HF ₁ Br (1,0,7) C ₃ HF ₁ Br (1,0,7) C ₄ HF ₁ Br (1,0,7) C ₅ HF ₁ Br (1,0,7) C ₇ HF ₁ Br (1,0,7) C ₈ HF ₁ Br (1,0,7) C ₉ H ₁ F ₁ Br (1,0,7) C ₁ HF ₁ Br (1,0,7) C ₁ HF ₂ Br (1,0,7) C ₂ HF ₂ Br (1,0,7) C ₃ HF ₂ Br (1,0,7) C ₄ HF ₂ Br (1,0,7) C ₅ HF ₂ Br (1,0,7) C ₇ HF ₂ Br (1,0,7) C ₈ HF ₂ Br (1,0,7) C ₈ HF ₂ Br (1,0,7) C ₈ HF ₂ Br (1,0,7) C ₉ H ₄ F ₂ Br (1,0,7) C ₉ H ₄ F ₂ Br (1,0,7) C ₉ H ₄ F ₂ Br (1,0,7) C ₁ H ₄ F ₂ Br (1,0,7) C ₂ H ₄ F ₃ Br (1,0,7) C ₃ H ₄ F ₂ Br (1,0,7) C ₄ H ₅ F ₂ Br (1,0,7) C ₅ H ₄ F ₂ Br (1,0,7) C ₇ H ₄ F ₂ Br (1,0		1.0
E. Group V: C 2 H 3 Cl ₂ -1,1,1 Trichloroethane (Methyl chloroform) All isomers of the above chemical except 1,1,2-trichloroethane F. Group VI: CH ₃ Br—Bromomethane (Methyl Bromide) G. Group VII: CHFBR ₂ CHF ₂ Br (HBFC-2201) C1,2 HFB Br C2 HF ₂ Br ₃ C3 HF ₃ Br C4-1. C4 H ₂ FBr C5 HF ₃ Br C6 HF ₃ Br C7 HF ₃ Br C7 HF ₃ Br C8 HF ₃ Br C9 HF ₃ Br C1-1. C9 H ₃ FBr C1-1. C1 H ₃ FBr C2 H ₄ FBr C2 H ₅ FBr C3 HF ₅ Br C4 H ₅ Br C5 H ₅ Br C6 H ₅ Br C7 H ₅ Br C8 HF ₅ Br C9 H ₅ Br C9 H ₅ Br C9 H ₅ Br C1 H ₅ Br C1 H ₅ Br C2 H ₅ FBr C3 HF ₅ Br C3 H ₅ F ₅ Br C0 DOPO C3 HF ₅ BP C0 DOPO C3 HF ₅ BP C0 DOPO C3 HF ₅ BP C0		1.1
C ₂ H ₃ Cl ₃ -1,1,1 Trichloroethane (Methyl chloroform) 0. All isomers of the above chemical except 1,1,2-trichloroethane 1,1,2-trichloroethane F. Group VI: CH ₃ Br—Bromomethane (Methyl Bromide) 0. G. Group VII: 0. CHFBR ₂ 1.0 CHFBR ₃ 0.7 C2 HF ₂ Br ₃ 0.5-1. C3 HF ₃ Br ₂ 0.4-1. C4 HF ₃ Br ₃ 0.5-1. C5 HF ₃ Br ₃ 0.7-1. C6 HF ₃ Br ₃ 0.7-1. C7 HF ₃ Br ₃ 0.7-1. C8 HF ₃ Br ₂ 0.4-1. C9 HF ₃ Br ₃ 0.7-1. C1 HF ₃ Br ₂ 0.2-1. C2 HF ₄ FBr ₃ 0.7-1. C3 HF ₂ Br ₃ 0.2-1. C4 H ₂ FBr ₃ 0.7-1. C5 H ₂ FBr ₃ 0.2-1. C6 H ₃ F ₂ Br ₂ 0.2-1. C7 H ₄ FBr 0.07-0. C8 HF ₄ Br ₃ 0.2-1. C9 H ₄ FBr 0.07-0. C3 HF ₂ Br ₃ 0.2-1. C3 HF ₃ Br ₃ 0.2-1. C3 HF ₃ F ₃ Br ₃ <t< td=""><td></td><td></td></t<>		
All isomers of the above chemical except 1,1,2-trichloroethane F. Group VI: CH ₃ Br—Bromomethane (Methyl Bromide) 0. G. Group VII: CHFBR ₂ 1.0 0.7 CH ₂ FBr (MBFC-2201) 0.7 C ₂ HFBr ₄ 0.5-1. C ₂ HF ₂ Br ₃ 0.5-1. C ₂ HF ₃ Br ₂ 0.4-1. C ₂ H ₄ FBr 0.7-1. C ₄ H ₅ FBr ₅ 0.2-1. C ₅ H ₅ FBr ₅ 0.2-1. C ₆ H ₇ Br ₇ 0.2-1. C ₇ H ₇ Br ₈ 0.2-1. C ₈ H ₇ Br ₈ 0.2-1. C ₉ H ₈ FBr ₈ 0.2-1. C ₉ H ₈ FBr ₈ 0.2-1. C ₁ H ₁ FBr ₂ 0.2-1. C ₁ H ₁ FBr ₂ 0.2-1. C ₂ H ₃ F ₃ Br 0.2-1. C ₃ HF ₃ Br ₄ 0.3-1. C ₃ HF ₄ Br ₅ 0.2-1. C ₃ HF ₅ Br ₅ 0.2-1. C ₃ HF ₅ Br ₆ 0.3-1. C ₃ HF ₆ Br 0.3-1. C ₃ H ₇ Br ₈ 0.5-2. C ₃ H ₇ Br ₈ 0.5-2. C ₃ H ₇ Br ₈ 0.2-2. C ₃ H ₇ F ₈ Br ₉ 0.1-11. C ₃ H ₇ F ₈ Br ₉ 0.2-2. C ₃ H ₇ F ₈		
1,1,2-trichloroethane F. Group VI: CH ₃ Br—Bromomethane (Methyl Bromide) G. Group VII: CHFBR2 CHF ₂ Br (HBFC-2201) CH ₂ FBr 0.7 C ₂ HF ₂ Br ₃ C ₃ HF ₃ Br ₂ C ₄ H ₅ Br ₅ C ₅ H ₅ Br 0.7-1. C ₄ H ₅ Br 0.7-1. C ₅ H ₅ Br 0.7-1. C ₆ H ₇ Br 0.7-1. C ₇ H ₇ Br 0.7-1. C ₈ H ₇ Br 0.7-1. C ₉ H ₇ Br 0.7-1. C ₉ H ₇ Br 0.7-1. C ₁ H ₇ Br 0.7-1. C ₁ H ₇ Br 0.7-1. C ₁ H ₇ Br 0.7-1. C ₂ H ₇ F ₈ Br 0.7-1. C ₃ H ₇ Br 0.7-1. C ₄ H ₇ F ₈ Br 0.7-1. C ₅ H ₇ F ₈ Br 0.7-1. C ₇ H ₇ F ₈ Br 0.7-1. C ₈ H ₇ Br 0.7-1. C ₉ H ₇ F ₈ Br 0.7-1. C ₉ H ₇ F ₈ Br 0.7-1. C ₉ H ₇ F ₈ Br 0.3-1. C ₉ H ₇ H ₈ H ₉ 0.3-1. C ₉ H ₇ Br ₈ 0.3-1. C ₁ H ₇ Br ₈ 0.3-1. C ₃ H ₇ Br ₈ 0.3-2. C ₃ H ₇ Br ₈ 0.3-2. C ₃ H ₇ Br ₈ 0.2-2. C ₃ H ₇ Br ₈ 0.2-2. C ₃ H ₇ F ₈ Br 0.2-3. C ₃ H ₇ F ₈ Br 0.3-3. C ₃ H ₇ F ₈ Br ₉ 0.2-5. C ₃ H ₇ F ₈ Br 0.3-7. C ₃ H ₇ F ₈ Br 0.3-4. C ₃ H ₄ F ₅ Br		0.1
F. Group VI: CH ₃ Br—Bromomethane (Methyl Bromide) 0. G. Group VII: CHFBR ₂ 1.0 CHFBR ₂ 1.0 CHF ₂ Br (HBFC-2201) 0.7 C ₂ HFBr ₄ 0.3-0. C ₂ HF ₂ Br ₃ 0.5-1. C ₂ HF ₃ Br ₂ 0.5-1. C ₂ HF ₄ Br 0.7-1. C ₂ H ₄ FBr 0.7-1. C ₃ H ₅ Br ₃ 0.7-1. C ₄ H ₅ F ₂ Br ₃ 0.7-1. C ₅ H ₅ F ₃ Br 0.7-1. C ₇ H ₅ F ₃ Br 0.7-1. C ₈ H ₅ F ₃ Br 0.7-1. C ₉ H ₅ F ₃ Br 0.7-1. C ₁ H ₅ F ₃ Br 0.7-1. C ₁ H ₅ F ₃ Br 0.7-1. C ₂ H ₄ F ₃ Br 0.7-1. C ₃ HF ₄ F ₃ Br 0.3-1. C ₄ H ₅ F ₃ Br 0.3-1. C ₅ HF ₆ Br 0.3-1. C ₆ HF ₇ Br ₅ 0.3-1. C ₇ H ₇ Br ₅ Br ₄ 0.3-1. C ₈ H ₇ Br ₅ Br ₅ 0.7-3. C ₈ H ₇ Br ₈ Br ₅ 0.7-3. C ₈ H ₇ F ₈ Br ₈ 0.1-1. C ₉ H ₄ F ₇ Br ₈ 0.2-5. C ₈ H ₇ F ₈ Br ₈ 0.2-5. C ₈ H ₇ F ₈ Br ₈ 0.3-7. C ₈ H ₇ F ₈ Br ₈ 0.3-7. C ₈ H ₇ F ₈ Br ₈ 0.3-7. C ₈ H ₇ F ₈ Br ₈ 0.1-2. C ₈ H ₈ F ₈ Br ₈ 0.1-2. C ₈ H ₈ F ₈ Br ₉ 0.1-3. C ₈ H ₄ F ₂ Br ₉ 0.1-3. C ₈ H ₄ F ₂ Br ₉ 0.1-1. C ₉ H ₄ F ₂ Br ₉ 0.1-1. C ₉ H ₄ F ₂ Br ₉ 0.1-1. C ₉ H ₄ F ₂ Br ₉ 0.1-1. C ₉ H ₄ F ₂ Br ₉ 0.1-1. C ₉ H ₄ F ₂ Br ₉ 0.1-1. C ₉ H ₄ F ₂ Br ₉ 0.1-1.		
Bromide)		
G. Group VII: CHFBR2 CHF BR (HBFC-2201) 0.7 CH2 FBr 0.7 C2 HFBr4 0.3-0. C2 HF2 Br3 0.5-1. C2 HF3 Br2 0.4-1. C2 HF3 Br2 0.4-1. C2 HF4 Br3 0.7-1. C2 H2 FBr3 0.7-1. C2 H3 F2 Br3 0.7-1. C4 H3 FBr3 0.7-1. C5 H3 F2 Br3 0.7-1. C6 H4 F8 Br3 0.7-1. C7 H5 F8 Br3 0.7-1. C8 H5 F8 Br3 0.7-1. C9 H3 F2 Br3 0.7-1. C9 H3 F2 Br3 0.7-1. C1 H3 F2 Br3 0.7-1. C2 H3 F2 Br3 0.7-1. C3 HFBr6 0.3-1. C3 HF2 Br5 0.2-1. C3 HF8 Br3 0.3-1. C3 HF4 Br3 0.3-1. C3 HF4 Br3 0.3-1. C3 HF4 Br3 0.5-2. C3 HF5 Br2 0.9-2. C3 H5 F8 Br3 0.7-3. C3 H5 F8 Br3 0.7-3. C3 H5 F8 Br3 0.7-3. C3 H5 F8 Br3 0.1-11. C3 H3 F5 BR4 0.2-2. C3 H4 F8 Br3 0.3-1. C3 H5 F8 BR5 0.1-1. C3 H3 F5 BR8 0.1-1. C3 H4 F8 F8 D3 0.3-1. C3 H4 F8 F8 D3 0.3-4. C3 H4 F8 B8 0.3-4. C3 H4 F8 F8 D3 0.3-4. C3 H4 F8 B8 0.3-4. C3		0.7
CHFBR ₂ 1.0 CHF ₂ Br (HBFC-2201) 0.7 CH ₂ FBr 0.7 C ₂ HFBr ₄ 0.3-0. C ₂ HF ₂ Br ₃ 0.5-1. C ₂ HF ₃ 1.0-1. C ₄ HF ₃ Br ₂ 0.4-1. C ₅ HF ₄ Br 0.7-1. C ₇ H ₇ Br ₉ 0.2-1. C ₈ H ₇ E ₈ Br 0.7-1. C ₉ H ₇ E ₈ Br 0.7-1. C ₁ H ₇ E ₈ Br 0.7-1. C ₁ H ₇ E ₈ Br 0.7-1. C ₂ H ₃ F ₄ Br 0.7-1. C ₄ H ₇ E ₈ Br 0.7-1. C ₅ H ₇ E ₈ Br 0.7-1. C ₇ H ₇ E ₈ Br 0.7-1. C ₈ H ₇ E ₈ Br 0.7-1. C ₉ H ₇ E ₈ Br 0.7-1. C ₁ H ₇ E ₈ Br 0.7-1. C ₁ H ₁ E ₁ Br 0.7-1. C ₁ H ₁ E ₁ Br 0.7-1. C ₂ H ₃ F ₈ Br 0.7-1. C ₃ HF ₈ Hr ₃ 0.3-1. C ₄ H ₇ Br ₅ 0.3-1. C ₅ H ₇ H ₇ Br ₅ 0.2-1. C ₆ H ₇ H ₇ Br ₇ 0.9-2. C ₇ H ₇ H ₈ Br 0.7-3. C ₈ H ₇ H ₈ H ₈ 0.2-2. C ₈ H ₇ E ₈ Br 0.1-1. C ₈ H ₇ E ₇ Br ₈ 0.2-5. C ₈ H ₇ E ₈ Br ₈ 0.2-5. C ₈ H ₇ E ₈ Br ₈ 0.2-5. C ₈ H ₇ E ₈ Br ₈ 0.9-1. C ₈ H ₇ E ₈ Br ₈ 0.9-1. C ₈ H ₇ E ₈ Br ₈ 0.9-1. C ₈ H ₇ E ₈ Br ₈ 0.9-1. C ₈ H ₇ E ₈ Br ₈ 0.9-1. C ₈ H ₇ F ₈ Br ₈ 0.9-1. C ₈ H ₇ F ₈ Br ₈ 0.1-2. C ₈ H ₇ F ₈ Br ₈ 0.1-2. C ₈ H ₇ F ₈ Br ₉ 0.1-2. C ₈ H ₇ F ₈ Br ₉ 0.1-2. C ₈ H ₇ F ₈ Br ₉ 0.1-2. C ₈ H ₇ F ₈ Br ₉ 0.0-7-0. C ₈ H ₇ F ₈ Br 0.07-0. C ₉ H ₇		0.,
CHF₂ Br (HBFC-2201) 0.7 CH₂ FBr 0.7 C₂ HFBr₄ 0.3-0. C₂ HF₂ Br₃ 0.5-1. C₂ HF₃ Br₂ 0.4-1. C₂ HF₃ Br₃ 0.7-1. C₂ H₂ FBr₃ 0.1-1. C₂ H₂ FBr₃ 0.2-1. C₂ H₂ F₃ Br 0.7-1. C₂ H₃ FBr₂ 0.2-1. C₂ H₃ FBr₃ 0.2-1. C₃ HF₃ FBr 0.07-0. C₃ HFBr₆ 0.3-1. C₃ HF₃ Br₃ 0.2-1. C₃ HF₃ Br₃ 0.2-1. C₃ HF₃ Br₃ 0.2-2. C₃ HF₃ Br₃ 0.2-2. C₃ HF₃ Br₃ 0.5-2. C₃ HF₃ Br₃ 0.5-2. C₃ HF₃ Br₃ 0.7-3. C₃ H₅ F₃ Br₃ 0.1-1. C₃ H₂ F₃ Br₃ 0.2-2. C₃ H₃ F₃ Br₃ 0.2-2. C₃ H₃ F₃ Br₃ 0.2-5. C₃ H₃ F₃ Br₃ 0.9-1. C₃ H₃ F₃ Br₃ 0.1-1. C₃ H₃ F₃ Br₃ 0.1-2. C₃ H₃ F₃ Br₃ 0.1-2. C₃ H₃ F₃ Br₃ 0.1-2. C₃ H₃ F₃ Br₃ 0.1-2. <		1.00
CH₂ FBr 0.7 C₂ HFg₄ 0.3-0. C₂ HF₂ Br₃ 0.5-1. C₂ HF₃ Br₂ 0.4-1. C₂ Hr₄ Br 0.7-1. C₂ H₂ FBr₃ 0.1-1. C₂ H₂ FBr₃ 0.2-1. C₂ H₃ FBr₃ 0.7-1. C₂ H₃ FBr₂ 0.2-1. C₂ H₃ FBr₂ 0.2-1. C₂ H₃ FBr₃ 0.07-0. C₃ HFBr₆ 0.3-1. C₃ HF₂ Br₃ 0.2-1. C₃ HF₃ Br₃ 0.3-1. C₃ HF₃ Br₃ 0.5-2. C₃ HF₃ Br₃ 0.5-2. C₃ HF₃ Br₃ 0.7-3. C₃ H₂ FBR₃ 0.1-1. C₃ H₂ F₃ Br₃ 0.1-1. C₃ H₂ F₃ Br₃ 0.2-2. C₃ H₂ F₃ Br₃ 0.2-5. C₃ H₃ F₃ Br₃ 0.3-7. C₃ H₃ F₃ Br₃ 0.1-3. C₃ H₃ F₃ Br₃ 0.1-3. C₃ H₃ F₃ Br₃ 0.1-3. C₃ H₃ F₃ Br₃ 0.1-3. <td< td=""><td></td><td>0.74</td></td<>		0.74
C2 HFBr4 0.3-0. C2 HF2 Bf3 0.5-1. C2 HF3 Bf2 0.4-1. C2 HF4 Br 0.7-1. C2 H3 FBf3 0.1-1. C2 H3 F2 Bf2 0.2-1. C2 H2 F3 Br 0.7-1. C2 H3 F2 F3 0.2-1. C2 H3 F2 Bf2 0.1-1. C2 H3 F2 Bf3 0.2-1. C3 HF2 Bf3 0.2-1. C3 HF2 Bf3 0.2-1. C3 HF2 Bf3 0.2-1. C3 HF3 Bf4 0.3-1. C3 HF4 Bf3 0.5-2. C3 HF4 Bf3 0.5-2. C3 HF4 Bf3 0.5-2. C3 HF4 Bf3 0.7-3. C3 H3 F3 Bf3 0.2-5. C3 H3 F3 Bf3 0.2-5. C3 H3 F3 Bf3 0.2-5. C3 H3 F3 BF3 0.3-7. C3 H3 F3 BF4 0.3-7. C3 H3 F3 BF3 0.1-1. C3 H3 F3 BF4 0.0-7. C3 H3 F3 BF4 0.0-7. <		0.73
C2 HF ₃ Br ₃ 0.5-1. C2 HF ₃ Br ₂ 0.4-1. C2 HF ₄ Br 0.7-1. C2 H ₂ FBr ₃ 0.1-1. C2 H ₂ F ₃ Br 0.7-1. C2 H ₂ F ₃ Br 0.7-1. C2 H ₃ F ₂ Br 0.2-1. C2 H ₃ F ₂ Br 0.2-1. C3 HF ₃ Br ₅ 0.2-1. C3 HF ₃ Br ₅ 0.2-1. C3 HF ₃ Br ₄ 0.3-1. C3 HF ₃ Br ₄ 0.3-1. C3 HF ₃ Br ₄ 0.5-2. C3 HF ₅ Br ₂ 0.9-2. C3 HF ₆ Br 0.7-3. C3 H ₅ F ₃ Br ₃ 0.1-1. C3 H ₂ F ₄ Br ₄ 0.2-2. C3 H ₂ F ₄ Br ₂ 0.3-7. C3 H ₃ F ₅ BR 0.9-1. C3 H ₃ F ₅ BR 0.9-1. C3 H ₃ F ₂ Br ₃ 0.1-3. C3 H ₃ F ₃ Br 0.3-4. C3 H ₄ F ₃ Br 0.3-4. C3 H ₄ F ₃ Br 0.3-1. C3 H ₄ F ₃ Br 0.3-0. C3 H ₄ F ₃ Br 0.0-0. C3 H ₄ F ₃ Br 0.0-0. C3 H ₄ F ₃ Br 0.0-0. C3 H		
C2 HF3 BF2 0.4–1. C2 HF4 BF 0.7–1. C2 H2 F2 BF2 0.1–1. C2 H2 F3 BF 0.7–1. C2 H3 F3 BF 0.7–1. C2 H3 F2 BF 0.1–1. C2 H3 F2 BF 0.2–1. C3 HFBF6 0.3–1. C3 HF2 BF3 0.2–1. C3 HF3 BF4 0.3–1. C3 HF4 BF3 0.5–2. C3 HF5 BF2 0.9–2. C3 HF6 BF 0.7–3. C3 H5 BF3 0.1–1. C3 H5 BF3 0.2–2. C3 H5 BF3 0.1–1. C3 H5 F5 BF3 0.2–2. C3 H5 F5 BF3 0.2–5. C3 H5 F5 BF3 0.2–5. C3 H5 F5 BF3 0.2–5. C3 H5 F5 BF3 0.3–7. C3 H5 F5 BF3 0.1–3. C3 H5 F5 BF3 0.1–3. <td></td> <td></td>		
C2 HF4 Br 0.7-1. C2 H2 FBr3 0.1-1. C2 H3 F2 Br3 0.2-1. C2 H3 F2 Br3 0.7-1. C2 H4 FBr2 0.1-1. C3 H4 F2 Br3 0.2-1. C4 H3 F2 Br3 0.2-1. C5 H4 FBr6 0.3-1. C3 HF2 Br5 0.2-1. C3 HF3 Br4 0.3-1. C3 HF4 Br3 0.5-2. C3 HF6 Br 0.7-3. C3 H5 F8 Br5 0.1-1. C3 H5 F8 Br5 0.1-1. C3 H5 F2 Br4 0.2-2. C3 H5 F2 Br5 0.1-1. C3 H5 F2 BR5 0.1-1. C3 H5 F3 BR7 0.2-5. C3 H5 F3 BR7 0.2-5. C3 H5 F3 BR7 0.3-7. C3 H5 F3 BR 0.9-1. C3 H5 F3 BR 0.9-1. C3 H5 F3 BR7 0.1-3. C3 H5 F3 BR7 0.1-3. C3 H5 F3 BF2 0.1-3.		
C2 H2 FBf3 0.1-1. C2 H3 F2 Bf2 0.2-1. C2 H3 F3 Bf 0.7-1. C2 H3 FBf2 0.1-1. C2 H3 F2 Bf 0.2-1. C2 H4 FBf 0.07-0. C3 HFBf6 0.3-1. C3 HF3 Bf3 0.2-1. C3 HF4 Bf3 0.3-1. C3 HF4 Bf3 0.5-2. C3 HF6 Bf 0.7-3. C3 H75 Bf3 0.9-2. C3 H75 B73 0.2-2. C3 H75 B73 0.2-2. C3 H75 B73 0.2-2. C3 H2 F2 BR4 0.2-2. C3 H2 F3 B73 0.2-5. C3 H3 F5 BR 0.9-1. C3 H3 F2 B73 0.0-1. C3 H3 F3 B73 0.1-3. C3 H3 F3 B73 0.1-3. C3 H3 F3 B73 0.1-3. C3 H4 F3 B7 0.3-4. C3 H4 F3 B7 0.3-4. C3 H4 F3 B7 0.03-0. C3 H4 F3 B7 0.07-0. C3 H4 F3 B7 0.07-0. </td <td></td> <td></td>		
C2 H2 F2 Br2 0.2-1. C2 H3 F3 Br 0.7-1. C2 H3 F3 Br 0.1-1. C2 H3 F2 Br 0.2-1. C2 H4 FBr 0.07-0. C3 HFBr6 0.3-1. C3 HF2 Br5 0.2-1. C3 HF3 Br4 0.3-1. C3 HF4 Br3 0.5-2. C3 HF6 Br 0.7-3. C3 HF FBR5 0.1-1. C3 H5 FBR5 0.2-2. C3 H5 FBR5 0.1-1. C3 H5 FBR5 0.2-2. C3 H5 FBR5 0.2-2. C3 H5 FBR5 0.2-5. C3 H5 FBR5 0.3-7. C3 H5 F5 BR 0.9-1. C3 H5 F5 BR 0.9-1. C3 H5 F5 BR 0.1-3. C3 H5 F5 BF3 0.1-1. <tr< td=""><td></td><td></td></tr<>		
C2 H, F3 Br 0.7-1. C2 H, FBBr2 0.1-1. C3 H, F2 Br 0.2-1. C2 H, FBR 0.07-0. C3 HFBR6 0.3-1. C3 HF2 Bf5 0.2-1. C3 HF3 BR4 0.3-1. C3 HF4 BF3 0.5-2. C3 HF5 Bf2 0.9-2. C3 HF6 BR 0.7-3. C3 H; FBR5 0.1-1. C3 H; F2 BF4 0.2-2. C3 H; F3 BF3 0.2-5. C3 H; F5 BR 0.9-7. C3 H; F5 BR 0.1-2. C3 H; F5 BR 0.1-3. C3 H; F5 BF 0.1-3. C3 H; F5 BF 0.1-3. C3 H; F5 BF 0.1-3. C3 H; F6 BF 0.03-0. C3 H; FBF 0.03-0. C3 H; FBF 0.03-0. C3 H; FBF 0.07-0. C3 H; F2 BF 0.04-0. C3 H; F3 BF 0.07-0. C3 H; F3 BF 0.07-0.		
C2 H2 FBf2 0.1-1. C2 H3 F2 BF 0.2-1. C2 H4, FBF 0.07-0. C3 HFB6 0.3-1. C3 HF2 Bf3 0.2-1. C3 HF3 Bf4 0.3-1. C3 HF4 Bf3 0.5-2. C3 HF4 Bf3 0.5-2. C3 HF5 BF2 0.9-2. C3 HF6 BF 0.7-3. C3 H2 F2 BR4 0.2-2. C3 H2 F3 Bf3 0.2-5. C3 H2 F4 Bf2 0.3-7. C3 H3 F5 BR 0.9-1. C3 H3 F2 Bf3 0.08-1. C3 H3 F3 Bf3 0.1-3. C3 H4 FB73 0.3-4. C3 H4 FB73 0.03-0. C3 H4 F2 Bf2 0.1-1. C3 H4 F3 Br 0.03-0. C3 H4 F3 Br 0.07-0. C3 H5 F2 Bf2 0.1-1. C3 H4 F3 BF 0.07-0. C3 H5 F2 Bf 0.07-0. C3 H4 F3 BF 0.07-0.		
C ₂ H ₃ F ₂ Br 0.2-1. C ₂ H ₄ FBr 0.07-0. C ₃ HFBr ₆ 0.3-1. C ₃ HF ₂ Br ₅ 0.2-1. C ₃ HF ₃ Br ₄ 0.3-1. C ₃ HF ₃ Br ₄ 0.5-2. C ₃ HF ₅ Br ₂ 0.9-2. C ₃ HF ₆ Br 0.7-3. C ₃ H ₂ FBR ₅ 0.1-1. C ₃ H ₂ F ₃ Br ₃ 0.2-2. C ₃ H ₃ F ₃ Br ₃ 0.2-5. C ₃ H ₂ F ₄ Br ₂ 0.3-7. C ₃ H ₃ F ₅ BR 0.9-1. C ₃ H ₃ F ₃ Br ₃ 0.1-3. C ₃ H ₃ F ₃ Br ₃ 0.1-3. C ₃ H ₃ F ₄ Br 0.3-4. C ₃ H ₄ F ₃ Br 0.03-0. C ₃ H ₄ F ₂ Br ₂ 0.1-1. C ₃ H ₄ F ₂ Br ₂ 0.1-1. C ₃ H ₄ F ₂ Br ₂ 0.1-1. C ₃ H ₄ F ₅ Br 0.07-0. C ₃ H ₅ F ₂ Br 0.07-0. C ₃ H ₅ F ₂ Br 0.07-0. C ₃ H ₅ F ₂ Br 0.07-0. C ₃ H ₆ FB 0.02-0.		
C2 H4 FBr 0.07-0. C3 HF2 Bf6 0.3-1. C3 HF2 Bf5 0.2-1. C3 HF3 BF4 0.3-1. C3 HF4 Bf3 0.5-2. C3 HF5 Bf2 0.9-2. C3 HF6 BF 0.7-3. C3 H5 FBR5 0.1-1. C3 H5 F3 Bf3 0.2-5. C3 H5 F3 BF3 0.2-5. C3 H5 F3 BF3 0.9-1. C3 H5 F3 BF3 0.0-7. C3 H5 F3 BF3 0.0-7. C3 H5 F3 BF3 0.0-7. C3 H5 F3 BF3 0.1-3. C3 H5 F3 BF3 0.1-3. C3 H5 F3 BF3 0.1-3. C3 H5 F3 BF3 0.1-2. C3 H5 F3 BF3 0.1-3. C3 H5 F3 BF3 0.1-3. C3 H5 F3 BF3 0.0-0. C3 H5 F3 BF3 0.0-0. C3 H5 F3 BF3 0.0-0. C3 H5 F2 BF2 0.0-1. C3 H5 F2 BF2 0.0-0. C3 H5 F2 BF 0.0-0. C3 H5 F2 BF 0.00-0. C3 H5 F2 BF 0.00-0.		
C3 HFBr6 0.3-1. C3 HF2 Bf5 0.2-1. C3 HF3 Bf4 0.3-1. C3 HF4 Bf3 0.5-2. C3 HF5 Bf2 0.9-2. C3 HF6 Br 0.7-3. C3 H5 F2 BR4 0.2-2. C3 H5 F3 Bf3 0.2-5. C3 H5 F4 Bf2 0.3-7. C3 H5 F4 Bf2 0.3-7. C3 H5 F5 BR 0.9-1. C3 H5 F2 Bf3 0.08-1. C3 H5 F3 Bf3 0.1-3. C3 H5 F3 Bf3 0.1-3. C3 H5 F2 Bf3 0.1-3. C3 H5 F2 Bf3 0.1-3. C3 H5 F3 Bf2 0.1-2. C3 H5 F3 Bf3 0.3-4. C3 H5 F3 Bf4 0.03-0. C3 H5 F3 Bf5 0.07-0. C3 H5 F2 Bf2 0.1-1. C3 H5 F3 Bf2 0.07-0. C3 H5 F3 Bf 0.07-0. C3 H5 F5 Bf 0.07-0.		
C ₃ HF ₂ Br ₅ 0.2-1. C ₃ HF ₃ Br ₄ 0.3-1. C ₃ HF ₃ Br ₄ 0.5-2. C ₃ HF ₅ Br ₂ 0.9-2. C ₃ HF ₆ Br 0.7-3. C ₃ H ₂ F ₂ BR ₄ 0.2-2. C ₃ H ₂ F ₃ Br ₃ 0.2-5. C ₃ H ₂ F ₄ Br ₂ 0.3-7. C ₃ H ₃ F ₅ BR 0.9-1. C ₃ H ₃ F ₂ Br ₃ 0.1-3. C ₃ H ₃ F ₂ Br ₃ 0.1-3. C ₃ H ₃ F ₄ Br 0.3-4. C ₃ H ₄ F ₃ Br 0.03-0. C ₃ H ₄ F ₂ Br ₂ 0.1-1. C ₃ H ₄ F ₂ Br ₂ 0.1-1. C ₃ H ₄ F ₅ Br 0.07-0. C ₃ H ₄ F ₈ 0.07-0.		
C3 HF3 BF4 0.3-1. C3 HF4 BF3 0.5-2. C3 HF5 BF2 0.9-2. C3 HF6 BF 0.7-3. C3 H5 FBR5 0.1-1. C3 H5 F2 BR4 0.2-2. C3 H2 F3 BF3 0.2-5. C3 H2 F3 BF3 0.2-5. C3 H2 F3 BF3 0.3-7. C3 H3 F5 BR 0.9-1. C3 H3 F5 BF3 0.1-3. C3 H3 F2 BF3 0.1-3. C3 H3 F3 BF3 0.3-4. C3 H4 F3 BF3 0.03-0. C3 H4 F2 BF2 0.1-1. C3 H4 F2 BF2 0.1-1. C3 H4 F3 BF 0.07-0. C3 H5 F2 BF2 0.04-0. C3 H5 F2 BF 0.007-0. C3 H5 F2 BF 0.007-0. C3 H6 FB 0.007-0.		
C3 HF4 Br3 0.5-2. C3 HF5 Br2 0.9-2. C3 HF6 Br 0.7-3. C3 HF FBR5 0.1-1. C3 Hy FBR5 0.1-1. C3 Hy F3 Br3 0.2-5. C3 Hy F4 Br2 0.3-7. C3 Hy F5 BR 0.9-1. C3 Hy FBR4 0.08-1. C3 Hy F3 Br3 0.1-3. C3 Hy F8 BR4 0.08-1. C3 Hy F8 Br3 0.1-3. C3 Hy F4 Br 0.3-4. C3 Hy F4 Br3 0.03-0. C3 Hy F2 Br2 0.1-1. C3 Hy F2 Br2 0.1-1. C3 Hy F2 Br2 0.1-1. C3 Hy F2 Br2 0.07-0. C3 Hy F2 Br 0.07-0. C3 Hy F8 Br 0.07-0. C3 Hy F8 Br 0.07-0.		
C ₃ HF ₅ Bf ₂ 0.9-2. C ₃ HF ₆ Br 0.7-3. C ₃ H ₂ FgBR ₃ 0.1-1. C ₃ H ₂ F ₂ BR ₄ 0.2-2. C ₃ H ₂ F ₃ Bf ₃ 0.2-5. C ₃ H ₂ F ₄ BF ₂ 0.3-7. C ₃ H ₂ F ₃ BR 0.9-1. C ₃ H ₃ F ₂ BF ₃ 0.1-3. C ₃ H ₃ F ₂ BF ₃ 0.1-3. C ₃ H ₃ F ₄ Br 0.3-4. C ₃ H ₄ FBF ₃ 0.03-0. C ₃ H ₄ F ₂ Br ₂ 0.1-1. C ₃ H ₄ F ₂ Br ₂ 0.1-1. C ₃ H ₄ F ₃ Br 0.07-0. C ₃ H ₅ F ₂ Br 0.04-0. C ₃ H ₆ FB 0.07-0. C ₄ H ₆ FB 0.02-0.		
C3 HF6 Br 0.7-3. C3 H2 FBR5 0.1-1. C3 H2 FBR5 0.1-1. C3 H2 F3 BR3 0.2-5. C3 H2 F4 BF2 0.3-7. C3 H2 F5 BR 0.9-1. C3 H3 FBR4 0.08-1. C3 H3 F2 BF3 0.1-3. C3 H3 F3 BF2 0.1-2. C3 H3 F4 Br 0.3-4. C3 H4 FBF3 0.03-0. C3 H4 F2 BF2 0.1-1. C3 H4 F3 BF 0.07-0. C3 H5 F2 BF2 0.1-1. C3 H5 F2 BF2 0.04-0. C3 H5 F2 BF 0.00-0.		
C3 H2 FBRs 0.1-1. C3 H2 F2 BR4 0.2-2. C3 H2 F3 BF3 0.2-5. C3 H2 F3 BF3 0.2-5. C3 H2 F4 BF2 0.3-7. C3 H3 FBR4 0.9-1. C3 H3 F2 BF3 0.1-3. C3 H3 F2 BF3 0.1-2. C3 H3 F4 BF 0.3-4. C3 H4 FBF3 0.03-0. C3 H4 F2 BF2 0.1-1. C3 H4 F3 BF 0.07-0. C3 H5 F2 BF 0.04-0. C3 H5 FBF2 0.04-0. C3 H5 FB BF 0.07-0.		
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		
C ₃ H ₂ F ₃ Br ₃ 0.2-5. C ₃ H ₅ F ₄ Br ₂ 0.3-7. C ₃ H ₅ F ₅ BR 0.9-1. C ₃ H ₃ FBR ₄ 0.08-1. C ₃ H ₃ F ₂ Br ₃ 0.1-3. C ₃ H ₅ F ₃ Br ₂ 0.1-2. C ₃ H ₄ F ₃ Br 0.03-0. C ₃ H ₄ F ₂ Br ₅ 0.1-1. C ₃ H ₄ F ₃ Br 0.07-0. C ₃ H ₅ F ₃ F ₂ 0.04-0. C ₃ H ₅ F ₂ Br 0.07-0. C ₃ H ₅ F ₂ Br 0.07-0. C ₃ H ₅ F ₂ Br 0.07-0. C ₃ H ₅ F ₈ 0.07-0.		
C ₃ H ₂ F ₄ Br ₂ 0.3-7. C ₃ H ₅ F ₅ BR 0.9-1. C ₃ H ₃ FBR ₄ 0.08-1. C ₃ H ₃ F ₂ Br ₃ 0.1-3. C ₃ H ₃ F ₃ Br ₂ 0.1-2. C ₃ H ₄ F ₈ Br 0.3-4. C ₃ H ₄ FBr ₃ 0.03-0. C ₃ H ₄ F ₂ Br ₂ 0.1-1. C ₃ H ₄ F ₃ Br 0.07-0. C ₃ H ₅ F ₂ Br 0.04-0. C ₃ H ₅ F ₂ Br 0.07-0. C ₃ H ₆ FB 0.02-0.		
C ₃ H ₂ F ₅ BR 0.9-1 C ₃ H ₃ FBR ₄ 0.08-1 C ₃ H ₃ F ₂ Br ₃ 0.1-2 C ₃ H ₃ F ₄ Br 0.3-4 C ₃ H ₄ FBr ₃ 0.03-0 C ₃ H ₄ F ₂ Br ₂ 0.1-1 C ₃ H ₄ F ₃ Br 0.07-0 C ₃ H ₄ F ₃ Br 0.04-0 C ₃ H ₅ F ₂ Br 0.07-0		
C ₃ H ₃ FBR ₄ 0.08-1. C ₃ H ₃ F ₂ B ₁₃ 0.1-3. C ₃ H ₃ F ₃ B ₁₂ 0.1-2. C ₃ H ₃ F ₄ Br 0.3-4. C ₃ H ₄ F ₂ B ₁₃ 0.03-0. C ₃ H ₄ F ₂ B ₁₇ 0.1-1. C ₃ H ₄ F ₃ Br 0.07-0. C ₃ H ₅ FB ₁₂ 0.04-0. C ₃ H ₅ F ₂ Br 0.07-0. C ₃ H ₅ F ₂ Br 0.07-0. C ₃ H ₆ FB 0.02-0.		
C3 H3 F2 Br3 0.1-3. C3 H3 F3 Br2 0.1-2. C3 H3 F4 Br 0.3-4. C3 H4 FBr3 0.03-0. C3 H4 F2 Br2 0.1-1. C3 H4 F3 Br 0.07-0. C3 H5 FBr2 0.04-0. C3 H5 F2 Br 0.07-0. C3 H5 FB 0.07-0. C3 H6 FB 0.02-0.		
C ₃ H ₃ F ₃ Br ₂ 0.1-2. C ₃ H ₄ F ₄ Br 0.3-4. C ₃ H ₄ F _B F ₃ 0.03-0. C ₃ H ₄ F ₂ Br ₂ 0.1-1. C ₃ H ₄ F ₃ Br 0.07-0. C ₃ H ₅ F ₂ Br 0.04-0. C ₃ H ₅ F ₂ Br 0.07-0. C ₃ H ₅ F ₂ Br 0.07-0. C ₃ H ₅ F ₈ Br 0.07-0. C ₃ H ₅ F ₈ Br 0.07-0. C ₃ H ₅ F ₈ Br 0.07-0.		
C ₃ H ₃ F ₄ Br 0.3-4. C ₃ H ₄ FBr ₃ 0.03-0. C ₃ H ₄ F ₂ Br ₂ 0.1-1. C ₃ H ₄ F ₃ Br 0.07-0. C ₃ H ₅ FBr ₂ 0.04-0. C ₃ H ₅ F ₂ Br 0.07-0. C ₃ H ₅ F ₂ Br 0.07-0. C ₃ H ₆ FB 0.02-0.		
C3 H4 FBr3 0.03-0. C3 H4 F2 Br2 0.1-1. C3 H4 F3 Br 0.07-0. C3 H5 FBr2 0.04-0. C3 H5 FB 0.07-0. C3 H6 FB 0.02-0.		
C3 H4 F2 Br2 0.1-1. C3 H4 F3 Br 0.07-0. C3 H5 FBr2 0.04-0. C3 H5 F2 Br 0.07-0. C3 H6 FB 0.07-0.		
C3 H4 F3 Br 0.07-0. C3 H5 FBf2 0.04-0. C3 H5 F2 Br 0.07-0. C3 H5 FB 0.07-0. C3 H6 FB 0.02-0.		
C ₃ H ₅ FBr ₂ 0.04–0. C ₃ H ₅ F ₂ Br 0.07–0. C ₃ H ₆ FB 0.02–0.		
C ₃ H ₅ F ₂ Br		
C ₃ H ₆ FB 0.02–0.		
H Group VIII:		0.02-0.7
	H. Group VIII:	
CH2BrCl (Chlorobromomethane 0.12.	CH2BrCI (Chlorobromomethane 0.12.	

[60 FR 24986, May 10, 1995, as amended at 68 FR 42892, July 18, 2003]

APPENDIX B TO SUBPART A OF PART 82— CLASS II CONTROLLED SUBSTANCES A

China II Continuant accepting	
Controlled Substance	ODP
Dichlorofluoromethane (HCFC-21) Monochlorodifluoromethane (HCFC-22).	0.04 0.055
3. Monochlorofluoromethane (HCFC-31) 4. Tetrachlorofluoroethane (HCFC-121) 5. Trichlorodifluoroethane (HCFC-122) 6. Dichlorotrifluoroethane (HCFC-123) 7. Monochlorotetrafluoroethane (HCFC-	0.02 0.01–0.04 0.02–0.08 0.02 0.022
124). 8. Trichlorofluoroethane (HCFC-131) 9. Dichlorodifluoroethane (HCFC-132)	0.007-0.05